Application No.: 10/533,384 Attorney Docket No.: 05033.0010.PCUS00

In The Claims:

1-34 (Cancelled)

35. (Currently Amended) A research or diagnostic kit comprising (a) one or more probes for the detection of the over expression of at least one INK4a polypeptide and (b) one or more probes for the detection of at least one cell proliferation polypeptide marker in biological samples; a first primary antibody against p16^{INK4a} polypeptide, and (b) a second primary antibody against Ki67 polypeptide, wherein the first and second primary antibodies are obtained from different animals selected from the group consisting of mice, rats, rabbits, sheen, and goats:

wherein the kit components are provided in a way to allow for a simultaneous detection of the at-least-one-INK4a p16^{INK4a} polypeptide and the at-least-one-cell proliferation <u>Ki67</u> polypeptide marker, by at least two distinguishable detectable signals.

- (Currently Amended) The kit according to claim 35, wherein the INK4a polypeptide is selected from the group consisting of p16^{INK4a} and <u>further comprises an antibody against</u> p14ARF.
- 37. (Currently Amended) The kit according to claim 35, wherein the cell proliferation polypeptide marker is selected the group consisting of further comprises an antibody against CDC6, MCM2, MCM3, MCM4, MCM5, MCM6, MCM7, CDC7 protein kinase, Dbf4, CDC14 protein phosphatase, CDC45 and MCM10, Ki67, Ki-S2, Ki-S5, PCNA, rpA, and POLD or rfc.
- (Currently Amended) The kit according to claim 35 furthermore comprising at least one of the following:
 - a. a p16^{INK4a} sample for carrying out a positive control reaction,
 - b. a p14ARF sample for carrying out a positive control reaction,

Application No.: 10/533,384

Attorney Docket No.: 05033.0010.PCUS00

a Ki67 sample for carrying out a positive control reaction,

d. a Ki-S2 sample for carrying out a positive control reaction,

e. an MCM5 sample for carrying out a positive control reaction.

f. an MCM2 sample for carrying out a positive control reaction.

g. a PCNA sample for carrying out a positive control reaction.

h-reagents c. reagents for detection of the presence or absence and/or the level of p16INK4a, p16INK4a, and

i.reagents for detection of the presence or absence and/or the level of p14ARF,

j or d. reagents for detection of the presence or absence and/or the level of Ki67[[,]]

k. reagents for detection of the presence or absence and/or the level of Ki-S2,

l. reagents for detection of the presence or absence and/or the level of MCM5,

m. reagents for detection of the presence or absence and/or the level of MCM2,

n. reagents for detection of the presence or absence and/or the level of PCNA,

o. one or more samples of INK4a polypeptide for carrying out positive control

p. one or more samples of cell proliferation polypeptide marker for carrying out positive control reactions;

q. one or more reagents for the detection of the presence or absence and/or the level of other INK4a polypeptides, or

r. one or more reagents for the detection of the presence or absence and/or the level of other-cell-proliferation polypeptide markers.

39. (Currently Amended) The kit according to claim 35, wherein the one or more probes for the detection of the over-expression of at least one INK4a polypeptide and the one or more probes for the detection of at least one cell proliferation polypeptide marker Δ

reactions.

Application No.: 10/533,384 Attorney Docket No.: 05033.0010.PCUS00

research or diagnostic kit comprising (a) a first antibody against p16^{NK4a} polypeptide, and (b) a second antibody against Ki67 polypeptide, wherein said first and second antibody are labelled with distinguishable labels.

40-41. (Cancelled)

- 42. (Currently Amended) The kit according to claim 35 39, wherein said labels are selected from the group consisting of radioisotopes, bioluminescent compounds, chemiluminescent compounds, fluorescent compounds, metal chelates, and enzymes.
- 43. (Previous Presented) The kit according to claim 42, wherein said labels are fluorescent compounds or enzymes.

44-46. (Cancelled)

- 47. (Withdrawn-Currently Amended) The kit according to claim 46 35, wherein the cell-proliferation polypeptide marker is further comprises an antibody against MCM2.
- 48. (New) The kit according to claim 35, further comprises two secondary antibodies against the primary antibodies, said secondary antibodies are labelled with the two distinguishable detectable signals.
- 49. (New) The kit according to claim 48, wherein said first primary antibody is a mouse antibody and said second primary antibody is a rabbit antibody.